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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,883

09/27/2005

Volker Schoellmann

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

ZUBAJLO, JENNIFER L

ART UNIT

PAPER NUMBER

2629

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DELIVERY MODE

09/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,883	Applicant(s) SCHOELLMANN ET AL.	
	Examiner Jennifer Zubajlo	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/27/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 & 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Yukihiisa Takeuchi (Patent Number: US 6,281,868), hereinafter Takeuchi.

As to claim 1, Takeuchi teaches:

A display device comprising a light guide (see figure 1 – light guide 12 & column 13 lines 29-36), a back plate (see figure 1 – actuator board 18, 18a-18c & column 13 lines

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37-65), a flexible element arranged in between said light guide and said back plate (see figure 1 – shape holding layer 26 & column 13 line 66 – column 14 line 5), and addressable electrodes for inducing electrostatic forces on said element and for bringing selected portions of said element into contact with said light guide in order to extract light from said light guide (see figure 1 – upper electrode 28a, lower electrode 28b, ground line 68, & figure 10 – upper & lower electrodes 28a & 28b and column 13 line 66 – column 15 line 18 & column 20 line 58 – column 21 line 19), characterized in that said addressable electrodes are arranged only on one of said light guide and said back plate (see figure 1 – upper electrode 28a, lower electrode 28b, ground line 68, & figure 10 – upper & lower electrodes 28a & 28b and column 13 line 66 – column 15 line 18 & column 20 line 58 – column 21 line 19), and that a biasing force acts on said flexible element in a direction away from said addressable electrodes (see column 16 line 20 – column 17 line 2 & figure 6).

As to claim 2 (dependent on claim 1), Takeuchi teaches said addressable electrodes addressed using active matrix addressing (see figure 3).

As to claim 3 (dependent on claim 2), Takeuchi teaches thin film transistors (TFT) used to address the electrodes (see figure 3).

As to claim 8 (dependent on claim 1), Takeuchi teaches said addressable electrodes are arranged on the light guide (see figures 1 & 10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukihiisa Takeuchi (Patent Number: US 6,281,868).

As to claims 4 and 5 (both dependent on claim 1), Takeuchi teaches the limitations as outlined in the above rejection of claim 1. Takeuchi doesn't directly teach said element electrostatically/mechanically biased away from the addressing electrodes, however it would be obvious to one skilled in the art to make the flexible element away from the addressing electrodes depending on one's choice of design (also see fig. 33 (26) flexible element away from (28a) electrode).

As to claim 6 (dependent on claim 5), Takeuchi teaches an elastic layer between the flexible element and the addressable electrodes (see figure 33). Layer 22 is between flexible element 26 and electrode 28a. Layer 22 can be any flexible material such as elastic.

As to claim 7 (dependent on claim 1), Takeuchi teaches said addressable electrodes arranged on the back plate (see figures 1 & 10). However, the addressable electrodes in these figures are arranged on the light guide, but it is simply an engineering choice of design of the display to reverse the design and arrange the electrodes on the back plate (actuator board).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yukihiisa Takeuchi (Patent Number: US 6,281,868) in view of Che-Kuei Mai (Pub. No.: US 2004/0113162), hereinafter Mai.

As to claim 9 (dependent on claim 8), Takeuchi teaches the limitations as outlined in the above rejection of claims 1 and 8).

Takeuchi doesn't teach a reflective layer arranged underneath the TFT.

Mai teaches a reflective layer arranged underneath the TFT (see figure 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the reflective layer arranged underneath the TFT taught by Mai into the display device taught by Takeuchi in order to enhance the display quality.

Note: References cited include just some examples that Examiner feels best explain the prior art rejection. However, the entire references teach the scope of the claims in more detail. Examiner recommends that Applicant read the full disclosures

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent Number: US 6,483,492; US 6,525,483; Publication Number: US 2001/0043171; US 2004/0100201; WO 00/38163 & NPL Document: PHNL021414EPP.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Zubajlo whose telephone number is (571) 270-1551. The examiner can normally be reached on Monday-Friday, 8 am - 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JZ
8/29/2007


AMARE MENGISTU
SUPERVISORY PATENT EXAMINER